

# Efficacy of fractional CO<sub>2</sub> laser in the treatment of genitourinary syndrome of menopause in Latin-American population: first Peruvian experience

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## Abstract

### Objectives

This PUBA study aimed to assess the efficacy of fractional CO<sub>2</sub> laser in the treatment of genitourinary syndrome of menopause (GSM).

### Methods

GSM symptoms were assessed before, 1 month after the first session and 1 month after the third session of laser (3 sessions with a 30 days interval between them) in 60 women (median, interquartile range: 55, 49-69). Subjective (visual analog scale) and objective (Vaginal Health Index, VHIS; Vaginal Maturity Index/Frost Index; Spanish Overactive Bladder Questionnaire-Short Form, USMEX Spanish OAB-qSF and Female Sexual Function Index, FSFI) measures were used during the study period to assess CO<sub>2</sub> fractionated laser treatment outcomes compared to baseline.

### Results

Fractional CO<sub>2</sub> laser treatment was effective to improve GSM symptoms (vaginal dryness, vaginal itching, vaginal burning, dyspareunia, dysuria, urinary urgency;  $P < 0.001$ ) after three sessions, as well as VHIS (median, interquartile range: 13, 10-15 at baseline vs. 21, 20-23 at the fourth month follow up;  $P < 0.001$ ), Frost Index (median, interquartile range: 28, 24-31 at baseline vs. 8, 6-10 at the fourth month follow up;  $P < 0.001$ ), USMEX (median, interquartile range: 56, 46-68 at baseline vs 14, 13-16 at the fourth month follow up;  $P < 0,001$ ) and FSFI (median, interquartile range: 5, 2-14 at baseline vs 30, 28-32).

### Conclusions

In this sample, the data suggests that fractionated CO<sub>2</sub> laser is an effective alternative for GSM treatment with positive outcomes that persists over time.